

U.S. Patent Application No. 09/977,500

Docket No.: 30004645-02 (1509-224)

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. *(currently amended)* A method of establishing communication over a data network between endpoint systems using a service system that can set up a communication session with an associated transport mechanism enabling the exchange of data between endpoint systems joined to the session by the service system, the method comprising:

processing a communication request received at the service system, on the basis of information associated with the request, said processing including:

(a) identifying by the service system, from a pool of current communication sessions, an appropriate session for the communication requested based on comparing session information of one or more of the current communication sessions with information associated with the communication request and, where no appropriate session currently exists, creating a new appropriate session; and

(b) identifying, from a pool of available parties, a specific party and associated endpoint system to join the session identified or created in step (a).

2. *(previously presented)* A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system, said information associated with the communication request including information input by a party associated with an endpoint system generating the communication request.

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3. (previously presented) A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system, said information associated with the communication request including information about a topic of interest to the party, the information being derived from the identity or content of information pages served to that party from an information page server.

4. (previously presented) A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system and includes an identifier of that party, said information associated with the communication request including information obtained by the service system as a result of accessing a party-profile database using the party identifier.

5. (previously presented) A method according to claim 1, wherein a first endpoint system wishing to communicate with a second endpoint system appropriate to a target subject sends a communication request to the service system with information identifying itself and describing the target subject, the service system carrying out steps (a) and (b) to provide an appropriate communication session and identify an appropriate second endpoint system, the service system inviting the identified first and second endpoint systems into the communication session.

6. (previously presented) A method according to claim 1, wherein the service system is associated with a contact center, and said pool of available parties includes a pool of available customer service representatives.

7. (previously presented) A method according to claim 1, wherein in setting up a communication session, the service system creates a respective service session functional entity which, when joining an endpoint system to the session, sends connection details of the transport mechanism associated with the communication session to the endpoint system or an associated

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proxy, said endpoint system or associated proxy then using the connection details to connect to the transport mechanism.

8. (previously presented) A method according to claim 7, wherein the service session functional entity comprises a session instance with generic behaviour capable of adding and removing endpoint systems to the communication session and capable of recording the endpoint systems currently joined to the communication session, and an associated service instance with service-specific behaviour capable of determining when the session instance is to add and remove endpoint systems.

9. (previously presented) A method according to claim 1, wherein in setting up a communication session, the service system creates a respective service session functional entity comprising a session instance with generic behaviour capable adding and removing endpoint systems to the communication session and capable of recording the endpoint systems currently joined to the communication session, and an associated service instance with service-specific behaviour capable of determining when the session instance is to add and remove endpoint systems.

10. (*Original*) A method according to claim 1, wherein the transport mechanism associated with a communication session provides multiple data transfer channels, for different media types, between endpoint systems joined to the communication session.

11. (previously presented) A method according to claim 10, wherein the endpoint systems include web browser functionality, the service system includes functionality, and the transport mechanism includes channels for at least two of the following: text chat; follow-me page-push; and packetized voice.

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12. (previously presented) A method according to claim 7, wherein the transport mechanism associated with a communication session includes multiple data transfer channels for different media types between endpoint systems joined to the communication session, the connection details passed to an endpoint system or its proxy comprising details of the media channels associated with the communication session, and the endpoint system or its proxy using these details to establish corresponding media channel connections to the transport mechanism.

13. (previously presented) A method according to claim 7, wherein the state of connection of an endpoint system to the transport mechanism is signaled to the service session functional entity by leg messages passed between a leg controller of the endpoint system or its proxy and a corresponding leg controller of the service session functional entity.

14. (previously presented) A method according to claim 7, wherein an endpoint system or its proxy to be joined to a communication session already has connection functionality for joining and participating in a communication session, the service session functional entity of the communication session to which the endpoint system is to be joined inviting this endpoint system into the session by sending said connection details to the connection functionality of the system or its proxy.

15. (previously presented) A method according to claim 7, wherein the service session functional entity of the communication session to which an endpoint system is to be joined invites said endpoint system into the session by sending both connection functionality for joining and participating in a communication session and said connection details.

16. (*Original*) A method according to claim 14, wherein the connection details and functionality are sent in association with a web page served by the service system.

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17. (*Currently amended*) A service system comprising:
- a session entity for establishing communication sessions and controlling the joining of endpoint entities to each communication session;
  - a transport entity for establishing a transport mechanism for each session established by the session entity, the transport mechanism being arranged for allowing the exchange of data across a network between endpoint entities joined to the session; and
  - request-handling means for receiving and processing a communication request to join a requesting endpoint entity into an appropriate session with another endpoint entity on the basis of information associated with the request, the request-handling means including:
    - session-routing means for identifying, from a pool of current communication sessions, an appropriate session for the communication requested based on a comparison of session information of one or more of the current communication sessions with information associated with the communication request and, where no appropriate session currently exists, creating a new appropriate session; and
    - participant-routing means for identifying, from a pool of available parties, a specific party and associated endpoint system to join the session identified or created by the session-routing means.

18. (previously presented) A system according to claim 17, wherein said information associated with the communication request includes information arranged to be input by a party associated with an endpoint system for generating the communication request, the request-handling means including means for extracting this information from the request.

19. (previously presented) A system according to claim 17, wherein said information associated with the communication request includes information about a topic of interest to a party, the service system including means for deriving said information about a topic of interest from the identity or content of information pages served to said party from an information page server.

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20. (previously presented) A system according to claim 17, wherein the communication request is arranged to be made by a party through an associated endpoint system and includes an identifier of said party, the service system including a party-profile database and said information associated with the communication request including information arranged to be obtained by the service system as a result of accessing the party-profile database using the party identifier.

21. (previously presented) A contact center including a service system according to claim 17, said pool of available including being a pool of available customer service representatives.

22. (previously presented) A processor arrangement for performing the method of claim 1.

23-24. (cancelled)

25. (new) A system according to claim 1, wherein the information associated with the communication request comprises initiation context information.

26. (new) A system according to claim 17, wherein the information associated with the communication request comprises initiation context information.